

AMENDMENTS TO THE CLAIMS

1. - 27. (Cancelled)

28. (Currently amended) A method for processing an order based on order-related inputs from an ordering user, comprising the steps of:

creating an order-related structure for an order from the user, including:

creating a plurality of order-related objects based on a plurality of order-related inputs obtained from the user, the plurality of order related objects including

an object of a first type representing one or more units of one or more items ordered by the user; and

a plurality of objects of a second type representing different alternative mechanisms to process a first aspect requirement of the order required necessary to complete ordering and delivering of the ordered one or more units of one or more items;

establishing a first relationship between the object of a first type and a first of the plurality of objects of a second type; and

establishing a second relationship between the object of a first type and a second of the plurality of objects of a second type,

wherein the first relationship indicates that the first aspect requirement of a first portion of the one or more units will be processed by the alternative mechanism represented by the first of the plurality of objects of a second type, and the second relationship indicates that the first aspect requirement of a second portion of the one or more units will be processed by the alternative mechanism represented by the second of the plurality of objects of a second type, and

wherein the first portion is determined by a property of the first relationship as defined based on said order-related inputs from the user, independent of the object of a first type or the first of the plurality of objects of a second type, and the second portion is determined by a property of the second relationship as defined based on said order-related inputs from the user, independent of the object of a first type or the second of the plurality of objects of a second type; and

processing the order based on the order-related structure by providing a result identifying the first portion of the one or more units to be processed by the alternative mechanism represented by the first of the plurality of objects of a second type, and identifying the second portion of the one or more units to be processed by the alternative mechanism represented by the second of the plurality of objects of a second type.

29. (Currently amended) The method of claim 28, wherein the plurality of order-related objects further includes a plurality of objects of a third type representing different alternative mechanisms to process a second aspect requirement of the order ~~required~~ necessary to complete ordering and delivering of the ordered one or more units of one or more items; and

wherein creating an order-related structure ~~the method further includes comprising the step of~~ establishing a third relationship between the object of a first type and a first of the plurality of objects of a third type,

wherein the third relationship indicates that the second aspect requirement of a third portion of the one or more units will be processed by the alternative mechanism represented by the first of the plurality of objects of a third type,

wherein the third portion is determined by a property of the third relationship as defined based on said order-related inputs from the user, independent of the object of a first type or the first of the plurality of objects of a third type, and

wherein processing the order based on the order-related structure ~~the result~~ also includes identifying ~~identifies~~ the third portion of the one or more units to be processed by the alternative mechanism represented by the first of the plurality of objects of a third type.

30. (Currently amended) The method of claim 29, wherein creating an order-related structure further includes comprising the step of establishing a fourth relationship between a third of the plurality of objects of a second type and a second of the plurality of objects of a third type,

wherein the fourth relationship indicates that the second aspect requirement of a portion of the third of the plurality of objects of a second type will be processed by the alternative mechanism represented by the second of the plurality of objects of a third type, and

wherein the portion of the third of the plurality of objects of a second type is determined by a property of the fourth relationship as defined based on said order-related inputs from the user, independent of the third of the plurality of objects of a second type or the second of the plurality of objects of a third type.

31. (Previously presented) The method of claim 29, wherein the third relationship is independent of the first or the second relationships.

32. (Previously presented) The method of claim 28, wherein the plurality of objects of a second type represent different methods for shipping an ordered unit.

33. (Previously presented) The method of claim 28, wherein the plurality of objects of a second type represent different destinations to which to ship an ordered unit.

34. (Previously presented) The method of claim 28, wherein the plurality of objects of a second type represent different methods to pay for an ordered unit.

35. (Previously presented) The method of claim 28, wherein the plurality of objects of a second type represent different cost centers that can be assigned to an ordered unit.

36. (Currently amended) The method of claim 28, wherein creating an order-related structure further includes ~~comprising the steps of~~ creating an order object representing all units of all items ordered by the user and establishing a third relationship between the order object and a third of the plurality of objects of a second type,

wherein the third relationship indicates that the first ~~aspect~~ requirement of a portion of all units in the order will be processed by the alternative mechanism represented by the third of the plurality of objects of a second type, and wherein the portion of all units in the order is determined by a property of the third relationship as defined based on said order-related inputs from the user, independent of the units in the order object or the third of the plurality of objects of a second type, and

wherein processing the order based on the order-related structure ~~the result~~ also includes identifying ~~identifies~~ the portion of all units in the order to be processed by the alternative mechanism represented by the third of the plurality of objects of a second type.

37. (Currently amended) The method of claim 28, wherein creating an order-related structure further includes ~~comprising the step of~~ selecting a third of the plurality of objects of a

second type as a default object to process the first aspect requirement of any portion of the one or more units not otherwise accounted for by any relationship between the object of a first type and an object of a second type, and

wherein processing the order based on the order-related structure ~~the result~~ also includes identifying ~~identifies~~ the portion of the one or more units to be processed by the alternative mechanism represented by the default object.

38. (Currently amended) The method of claim 28, wherein creating an order-related structure further includes ~~comprising the step of~~ verifying that the first aspect requirement of each of the one or more units will be processed by the alternative mechanism represented by one of the plurality of objects of a second type.

39. (Previously presented) The method of claim 28, wherein the first relationship has a type attribute and a quantity attribute, and wherein the type attribute specifies a type for the first portion and the quantity attribute specifies a quantitative value given by the user for the first portion.

40. (Previously presented) The method of claim 39, wherein the type represents a remainder type for the first portion.

41. (Currently amended) The method of claim 39, wherein the type represents the portion remaining after accounting for any portion determined by any relationship, other than the first relationship, between the object of a first type and an object of a second type.

42. (Previously presented) The method of claim 39, wherein the type represents a maximum portion and the quantity determines the size of the maximum portion.

43. (Previously presented) The method of claim 39, wherein the type represents a percentage of the total and the quantity determines the value of the percentage.

44. (Not entered)

45 - 47. (Cancelled)

48. (Currently amended) A computer program product, residing on a computer-readable medium, for use in processing an order based on order-related inputs from an ordering user, the computer program product comprising instructions for causing a computer to:

create an order-related structure for an order from the user, the instructions for causing a computer to create an order-related structure including instructions for causing a computer to:

create a plurality of order-related objects based on a plurality of order-related inputs obtained from the user, the plurality of order-related objects including

an object of a first type representing one or more units of one or more items ordered by the user; and

a plurality of objects of a second type representing different alternative mechanisms to process a first aspect requirement of the order required necessary to complete ordering and delivering of the ordered one or more units of one or more items;

establish a first relationship between the object of a first type and a first of the plurality of objects of a second type; and

establish a second relationship between the object of a first type and a second of the plurality of objects of a second type,

wherein the first relationship indicates that the first aspect requirement of a first portion of the one or more units will be processed by the alternative mechanism represented by the first of the plurality of objects of a second type, and the second relationship indicates that the first aspect requirement of a second portion of the one or more units will be processed by the alternative mechanism represented by the second of the plurality of objects of a second type, and

wherein the first portion is determined by a property of the first relationship as defined based on said order-related inputs from the user, independent of the object of a first type or the first of the plurality of objects of a second type, and the second portion is determined by a property of the second relationship as defined based on said order-related inputs from the user, independent of the object of a first type or the second of the plurality of objects of a second type; and

process the order based on the order-related structure by provide a result identifying the first portion of the one or more units to be processed by the alternative mechanism represented by the first of the plurality of objects of a second type, and identifying the second portion of the

one or more units to be processed by the alternative mechanism represented by the second of the plurality of objects of a second type.

49. (Currently amended) An ordering system comprising:

a user interface permitting a user to select one or more units of one or more items to be included in an order, select a plurality of alternative destinations for delivering the one or more units of the one or more items in the order, and select a plurality of alternative payment mechanisms for paying for the order; and

an order processing module programmed to:

create an order-related structure for an order from the user including:

create a plurality of order-related objects based on a plurality of order-related inputs obtained from the user, the plurality of order-related objects including one or more objects representing the one or more units of one or more items in an order, one or more objects representing the one or more alternative destinations to which the items are to be delivered, and one or more objects representing the one or more alternative payment mechanisms for paying for the order;

establish relationships between portions of the objects representing the one or more units of one or more items and individual of the objects representing alternative destinations; and

establish relationships between portions of the objects representing the one or more units of one or more items ~~in an order~~ and individual of the objects representing alternative payment mechanisms,

wherein each of the established relationships is independent of the objects related by the relationship; and

process the order based on the order-related structure by ~~provide a result~~ identifying the one or more units of one or more items to be delivered to each ~~selected~~ alternative destination, and identifying the portion of the order for which each of the ~~selected~~ alternative payment mechanisms is to be used.

50. (Currently amended) A method for processing an order based on order-related inputs from an ordering user, comprising the steps of:

creating an order-related structure for an order from the user, including:

creating a plurality of order-related objects based on a plurality of order-related inputs obtained from the user, the plurality of order related objects including

an object of a first type representing one or more units of one or more items ordered by the user; and

a plurality of objects of a second type representing different alternative mechanisms to process a first aspect requirement of the order required necessary to complete ordering and delivering of the ordered one or more units of one or more items, the first aspect requirement selected from a group consisting of payment method, shipment destination, and shipment method;

establishing a first relationship between the object of a first type and a first of the plurality of objects of a second type; and

establishing a second relationship between the object of a first type and a second of the plurality of objects of a second type,

wherein the first relationship indicates that the first aspect requirement of a first portion of the one or more units will be processed by the alternative mechanism represented by the first of the plurality of objects of a second type, and the second relationship indicates that the first aspect requirement of a second portion of the one or more units will be processed by the alternative mechanism represented by the second of the plurality of objects of a second type, and

wherein the first portion is determined by a property of the first relationship as defined based on said order-related inputs from the user, independent of the object of a first type or the first of the plurality of objects of a second type, and the second portion is determined by a property of the second relationship as defined based on said order-related inputs from the user, independent of the object of a first type or the second of the plurality of objects of a second type; and

processing the order based on the order-related structure by providing a result identifying the first portion of the one or more units to be processed by the alternative mechanism represented by the first of the plurality of objects of a second type, and identifying the second portion of the one or more units to be processed by the alternative mechanism represented by the second of the plurality of objects of a second type.